



# Arosha Fernando

AI & Data Science Undergraduate | Aspiring Machine Learning Engineer

## Contact

- +94 76 991 4283
- officialarosha3@gmail.com
- Colombo, Sri Lanka
- 200432400256
- linkedin.com/in/arosha-fernando-b82145333/
- github.com/arosharandew
- arosharandew.github.io/PortfolioWebsite/

## About Me

AI & Data Science undergraduate skilled in data analysis, machine learning (**TensorFlow**, **Keras**), statistics, data visualization (**Matplotlib**, **Seaborn**), and version control. Passionate about data-driven solutions with strong teamwork and problem-solving abilities. Seeking an **AI/ML** or **DS** internship to apply and expand my expertise.

## Skills

Proficient in **Python**, **Java**, **R**, **SQL**, **MongoDB**, **AWS**, **MS Azure**, **HTML**, **CSS**, **JavaScript**, and **PHP**, with experience in **Jupyter Notebook**. Skilled in **Machine Learning**, **Deep Learning**, **NLP**, **predictive modeling**, **data preprocessing**, **feature engineering**, and **model optimization** using **Scikit-learn**, **LightGBM**, **XGBoost**, and **Optuna**. Experienced in **Object-Oriented Development**, **Web Technology**, **Flask**, and **Spring Tool Suite**. Familiar with **Git**, **Docker**, **AWS**, **Azure**, **APIs**, and **web scraping** (**Selenium**, **BeautifulSoup**). Experienced with IDEs such as **IntelliJ**, **PyCharm**, and **WebStorm**. **Strong analytical**, **problem-solving**, and **teamwork skills** with a **focus on data-driven solutions**.

## References

- Mr. Sumie Gayaka Mithrapala** | **Mr. Janaka Jayasuriya**
- Hon. President, Board of Trustees - Sri Lanka Eye Donation Society
  - AGM-Collections & Business Revival, Sampath Bank PLC
  - sumiemithrapala67@gmail.com
  - janakaj@sampath.lk
  - +94 77 714 9144
  - +94 77 759 2726

## Education

### BSc (Hons) in Artificial Intelligence and Data Science

- Informatics Institute of Technology (IIT) | Awarded by Robert Gordon University (RGU), UK 2024 – 2028

Relevant Modules: Programming Fundamentals, Data Structures & Algorithms, Object-Oriented Development, Web Technology, Machine Learning, Artificial Intelligence, Data Engineering, Computational & Advanced Mathematics, Database Systems, Simulation & Modelling.

### G.C.E Advanced Level – Physical Science Stream (2023)

#### G.C.E Ordinary Level (2020)

- St. Joseph's College, Colombo 10 2009 - 2024
- A/L Results: Combined Maths (S), ICT (B), Physics (C), English (B)  
O/L Results: Maths (A), English (A), Dancing (A), Roman Catholic (A), Science (B), History (B), ICT (C), Commerce (C), Sinhala (C)

## Projects

### MindScope – Dementia Risk Predictor

- Built an ML pipeline predicting dementia from non-medical features. Engineered lifestyle scores, benchmarked six algorithms, and optimized with **Optuna**. Achieved **98.6% accuracy** and **0.9989 ROC-AUC**. Packaged with predictor class and confidence intervals for deployment.
- : [github.com/arosharandew/MindScope](https://github.com/arosharandew/MindScope)

### AgriForeSight – AI-Based Vegetable Price Forecasting Platform

- This ML pipeline predicts weekly Sri Lankan Whole-Sale vegetable prices using climate, historical price, and exchange data. I engineered features and tuned models with **Optuna**; the **Lasso model** achieved a test **R2 of 0.843** with **minimal overfitting**.
- : [github.com/Amika1118/DSGP\\_Group\\_38/tree/WholeSale-Price-Model](https://github.com/Amika1118/DSGP_Group_38/tree/WholeSale-Price-Model)

### ChurnSense – Customer Churn Prediction System

- Machine learning system predicting telecom churn using **Python**, **Numpy**, **Scikit-learn**, **PyTorch** and **Pandas** (2025). Preprocessed data, engineered features, tuned Decision Tree and MLP models. Achieved **80.2% accuracy** and **0.841 AUC** with **tuned neural network**, significantly outperforming baseline.
- : [github.com/arosharandew/ChurnSense-Customer-Churn-Prediction-System](https://github.com/arosharandew/ChurnSense-Customer-Churn-Prediction-System)

### Alertify – Sri Lanka Situational Awareness System

- Data Aggregation System for Sri Lanka: Python scrapers (**Selenium**, **BeautifulSoup**) for fuel/news, **APIs** for weather/tweets, **CSV storage**. Developed robust data pipelines, integrated multiple sources, achieving automated collection of real-time information for analysis.
- : [github.com/arosharandew/Alertify-Sri-Lanka-Situational-Awareness-System](https://github.com/arosharandew/Alertify-Sri-Lanka-Situational-Awareness-System)

### TalentAlign – AI-Powered CV Screening & Job Matching System

- AI-Powered CV Screening & Job Matching System (**ongoing**) built with **Python**, **Scikit-learn**, **NLP**, and **Flask**. Implements **CV parsing**, **ML-based interview prediction**, and job matching with scoring. Streamlines recruitment, reduces manual screening, and improves candidate-job fit accuracy.

## Clubs & Societies

### IEEE Student Branch – IIT (June 2024 – Present)

#### Member of:

- IEEE Robotics and Automation Society
- IEEE Computational Intelligence Society
- Actively participated in tech programmes like IX, Robot Nexus, and ModelX, and was **selected for the final round of the ModelX ML/DS Hackathon**.

#### Standing Committee Member of:

- Web & Technical (Jan 2026 – Present)



## Certifications & Achievements

- Microsoft Azure Fundamentals (AZ-900) Cert Prep – Microsoft Press
- AWS Certified Data Engineer – Associate (DEA-C01) Cert Prep
- Artificial Intelligence Foundations: Thinking Machines
- Python for Beginners
- AI/ML Engineer – Stage 1 and Stage 2
- Docker Foundations Professional Certificate
- Assured Diploma in Information Technology (DITEC) – Pearson